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EXAMINER

HENN, TIMOTHY J

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2622

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/630,903

Applicant(s)

ITO, KENJI

Examiner

Timothy J. Henn

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3-5, 9, 10 and 15-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Hirai (US 2003/0031469).

[claim 1]

Regarding claim 1, Hirai discloses a digital camera (Figure 1; note paragraph 0004 discusses DV or digital recording formats and Paragraph 0029 discusses "bits" per frame)) comprising: an image pickup device for shooting a subject image (Figure 1, Item 1), motion picture compression means for compressing on a per frame basis the motion picture data of a subject image shot with the image pickup device and recording the compressed data onto a recording medium (Figure 1, Items 1 and 8), marking instruction means for instructing addition of marking data to an arbitrary frame in

recording the motion picture data onto the recording medium (Paragraph 0037, shutter 12/portrait mode switch 13; sub-code), marking means for adding marking data to a frame specified by the marking instruction means (Paragraph 0037), search means for reading the compressed motion picture data from the recording medium and for detecting a frame where the marking data is added from the compressed motion picture data read from the recording medium (Figure 2; Paragraph 0041-0045; "a portrait mode is detected in the separated sub-code"); motion picture decompression means for decompressing the frame and a predetermined number of frames in the neighborhood of the frame on a per frame basis each time the frame where the marking data is added is detected by the search means (Figure 2, Item 21; Paragraph 0042-0043); playback means for replaying the decompressed frame (Figure 2, Item 24); selection means for selecting an arbitrary frame during playback by the playback means (Paragraph 0030 or 0042-0045, "a frame of good expression of a man will be selected") and still picture data recording means for recording a frame selected by the selection means as still picture data onto the recording medium (Paragraph 0030; it is noted that a single frame stored in memory can be considered "still picture data").

[claim 3]

Regarding claim 3, Hirai discloses an interface for outputting still picture data recorded on the recording medium to an external device (Figure 2, VIDEO OUTPUT).

[claim 4]

Regarding claim 4, Hirai discloses marking instruction means instructs addition of marking data to the arbitrary frame in accordance with an instruction from a user (Figure

1, Item 12 or 13; i.e. a user must operate the switches described).

[claim 5]

Regarding claim 5, Hirai discloses playback means which plays back the decompressed frame and a predetermined number of decompressed frames in the neighborhood of the decompressed frame prior to the selection of the arbitrary frame by the selection means (Paragraph 0030 and 0041-0045).

[claim 9]

Regarding claim 9, Hirai discloses selecting an arbitrary frame displayed during the playback in accordance with an instruction from a user (Paragraph 0030 and 0041-0045).

[claim 10]

Regarding claim 10, Hirai discloses selecting an arbitrary frame displayed during the playback in accordance with an instruction from a user (Paragraph 0030 and 0041-0045).

[claim 15]

Regarding claim 15, Hirai discloses a search means which detects the plurality of frames where the marking data is added after an end of shooting the subject image (Paragraph 0041-0045; note that Hirai discloses a search function during "playback time").

[claim 16]

Regarding claim 16, Hirai discloses a search means which detects the plurality of frames where the marking data is added after an end of shooting the subject image

(Paragraph 0041-0045; note that Hirai discloses a search function during "playback time").

[claim 17]

Regarding claim 17, Hirai discloses a digital camera which includes the recording medium (Figure 1).

[claim 18]

Regarding claim 18, Hirai discloses a camera (Figure 1) comprising: an image pickup circuit that shoots a subject image and generates motion picture data (Figure 1, Item 1); a compression circuit that compresses on a per frame basis the motion picture data of the subject image shot with the image pickup circuit and records the compressed data onto a recording medium (Figure 1, Item 2); an instruction circuit that instructs addition of marking data to an arbitrary frame of the compressed motion picture data compressed by the compression circuit, while the image pickup circuit shoots the subject image (Paragraph 0036-0037); marking circuit that adds marking data to the arbitrary frame specified by the instruction circuit, wherein the marking circuit generates modified motion picture data of the subject that includes the marking data to the arbitrary frame (Paragraph 0036-0037; sub-code); a first recording circuit that records the compressed and modified motion picture data generated by the marking circuit onto the recording medium (Figure 1, Item 9); a search circuit that reads the compressed motion picture data from the recording medium and detects a frame where the marking data is added from the compressed motion picture data read from the recording medium (Figure 2; Paragraphs 0041-0045); a decompression circuit that

decompresses the detected frame and a predetermined number of frames in the neighborhood of the detected frame on a per frame basis each time a frame where the marking data is added is detected by the search circuit (Figure 2, Item 21; Paragraphs 0041-0045); a playback circuit that plays back the detected decompressed frame and the predetermined number of decompressed frames in the neighborhood of the detected frame, when the search circuit finds the detected frame (Figure 2, Item 24; Paragraphs 0041-0045); a selection circuit for selecting a desired frame among the detected frame and the predetermined number of frames in the neighborhood of the detected frame during playback by the playback circuit (Paragraph 0030 and 0041-0045); and a second recording circuit that records the desired frame, selected by the selection circuit, as a still picture onto the recording medium (Paragraph 0030).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirai (US 2003/0031469).

[claim 2]

Regarding claim 2, Hirai discloses a recording medium but does not explicitly disclose a recording medium detachable from the camera. Official Notice is taken that

the use of detachable recording mediums in camera devices is well known in the art to increase the amount of images which may be stored by detaching full recording mediums and attaching empty recording mediums. Therefore, it would be obvious to one of ordinary skill in the art to make the recording medium of Hirai detachable to increase the amount of images which may be stored.

[claim 14]

Regarding claim 14, Hirai discloses adding marking data to frames, but does not explicitly disclose adding the marking data to a plurality of frames and searching a plurality of frames while reading motion picture data from the recording medium. Official Notice is taken that it is well known to use digital cameras to capture, record and review a plurality of images. Therefore, it would be obvious to capture, record and review multiple images with the camera of Hirai to obtain images of multiple scenes. It is noted that when capturing, recording and reviewing images with the camera of Hirai, it would be obvious to add and search of marking data as described.

6. Claims 6 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirai (US 2003/0031469) in view of Miyazaki (US 2005/0231631).

[claim 6]

Regarding claim 6, Hirai does not disclose replaying the frames at a playback speed less than half of a regular playback speed. Miyazaki discloses a playback means which replays decompressed frames and a number of neighboring frames in the neighborhood of the decompressed frame using an array of frames to allow selection of

a desired frame (Figure 1). The examiner notes, as broadly as claimed, such a playback system can be said to be "less than half of a regular playback speed of the playback means" since the displayed frames are not changed. For example, a regular playback of 5 frames/second would change the displayed frame once every 1/5th of a second. Since the playback shown in Figure 1 does not change the frame, it can be considered to be playing back at a speed "less than half of a regular playback speed" as claimed. Therefore, it would be obvious to use of the playback system of Miyazaki when displaying the frames of Hirai to allow the user to view multiple frames at once and compare the captured frames prior to selection of a desired frame.

[claims 11-13]

Regarding claims 11-13, Hirari discloses replaying neighboring frames, but does not explicitly state whether they are subsequent to or preceding the decompress frame. Miyazaki discloses a predetermined number of frames in the neighborhood of the frame which are preceding frames and subsequent frames to the frame (e.g. Figure 1). By displaying images proceeding and subsequent to a captured frame, the system of Miyazaki allows for images to be saved even if they happen before or after a shutter instruction. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to record and playback neighboring frames preceding and subsequent to a decompressed frame as claimed to ensure that desired pictures before or after the start of recording are not missed.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- | | | |
|-----|---------|-----------------|
| i. | Shimizu | US 7,064,780 |
| ii. | Melton | US 2003/0133022 |

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Henn whose telephone number is (571) 272-7310. The examiner can normally be reached on M-F 11-7.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571) 272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TJH
1/5/2007



LIN YE
SUPERVISORY PATENT EXAMINER